

Amendments to the Claims:

1. (Currently Amended) ~~A method of~~ An apparatus for monitoring the reliability of a data link for a data transmission between a server data processing apparatus and a client data processing apparatus, the apparatus comprising:

~~in which a server application program is run on the server~~ data processing apparatus, which server application program comprises:

- a first control unit for generating control data, and
- a second control unit,

~~in which a client application program is run on the client~~ data processing apparatus, which client application program comprises:

a representation unit for generating image data for representing an image on a client display screen which is connected to the client data processing apparatus, and

also comprises a test unit,

a data link over ~~in which the server application program and the client application program exchange data via a data link,~~

~~in which the representation unit being configured to generate[[s]], in dependence on incoming control data, image data~~ ~~in order~~ to form a control representation on the client display screen,

~~in which the first control unit is being configured to:~~

triggered by ~~means of~~ a trigger signal,

~~in which the control unit generate[[s]]~~ first control data after the arrival of the trigger signal and for a predetermined running time which starts anew at each trigger signal, the first control data which generate generating a first control representation on the client display screen, which first control representation optically informs the user of the existence of a reliable data link,

~~in which the control unit generate[[s]]~~ second control data after expiration of the delay running time, which second control data generates a second control representation on the client display

screen which optically informs the user of the absence of a reliable data link,

~~in which the second control unit earries being configured to carry out a test procedure during which the second control unit periodically transmits a test message to the test unit,~~

~~in which the test unit being configured to return[[s]], in dependence on the incoming test message, this test message or a different test message to the server application program.~~

~~in which the first control unit further being configured to:~~

~~be is triggered in the context of the test procedure only~~

~~if the returned test message is in order, and~~

~~in which the period of the test procedure with which the second control unit being configured to repeat[[s]] the transmission of the test messages is with a time period shorter than the than a running time during which the first control unit generates the first control data.~~

2. (Currently Amended) [[A]] The method as claimed in claim [[1]]
17, wherein further including:

~~the trigger signal is formed by the test message returned by the test unit, in which method the test unit transmits transmitting the trigger signal to the first control unit from the test unit and in which method the control unit is triggered by the trigger signal only if this signal is in order.~~

3. (Currently Amended) [[A]] The method as claimed in claim [[1]]
17, wherein further including:

~~transmitting the trigger signal is formed by the test message transmitted by from the second control unit and is returned by in response to the reply message from the test unit.~~

4. (Currently Amended) [[A]] The method as claimed in claim [[1]]
17, wherein the test unit generates further including:

~~generating an error message in the case where in response to no test message transmitted by from the second control unit reaches reaching the test unit during [[a]] the predetermined test running time which is longer than the period of the test procedure,~~

~~in which method the test unit applies applying the error message directly to the representation unit,~~

~~with the representation unit which forms, forming on the basis of the test message, a suitable warning indication on the client display screen which can be optically recognized by the user and [[/or]]~~

~~in which method the test unit applies the error message directly to a sound card of the client which outputs, on the basis of the error message, via a loudspeaker, a suitable warning indication which can be acoustically recognized by the user.~~

5. (Currently Amended) [[A]] The method as claimed in claim [[1]]
17, wherein further including:

connecting the server data processing apparatus can be connected to one of: an open [[and/or]] external data network and to a closed [[and/or]] internal data network[[,]] so that to form the data link between the server data processing apparatus and the client data processing apparatus can be formed at option by the open and/or external data network or by the closed and/or internal data network,

in which method with the second control device, tests testing, when the client logs into the server data processing apparatus, whether the client logs in via the open [[and/or]] external data network or via the closed [[and/or]] internal data network,

in which method, in the case wherein response to the client logs logging in via the open [[and/or]] external data network, with the second control unit starts starting the test procedure and transmits transmitting a first test message to the test unit,

in which method, in the case wherein response to the client logs logging in via the closed and or internal data network[[]], the control unit does not starting the test procedure with the second control unit and repeatedly transmits

transmitting, independently therefrom, trigger signals to the first control unit with the a period of the test procedure less than the running time.

6. (Currently Amended) [[A]] The method as claimed in claim [[1]]
17, wherein further including:

with the second control unit, carrying ~~carries out~~ a function test prior to the execution of the test procedure or in the context of the test procedure, which function test tests whether the test unit is present and/or which version of the test unit is involved and/or whether communication with the test unit is possible,

in which method, in the case where response to appropriate communication with a compatible version of the test unit ~~is being~~ possible, with the control unit starts or continues starting or continuing the test procedure and ~~otherwise does in response to appropriate communication not being possible, not starting or interrupts interrupting~~ the test procure and drives driving the first control unit in such a manner that it does not transmit control data to the representation unit.

7. (Currently Amended) [[A]] The method as claimed in claim 6,
wherein further including:

in the case where response to the appropriate communication with a compatible version of the test unit ~~is not being~~ possible, with the control unit, generating generates an error message and applies applying it to the representation unit,

with the representation unit, then-forming, on the basis of the error message, a suitable warning indication on the client display screen which can be optically recognized by the user.

8. (Currently Amended) [[A]] The method as claimed in claim 6,
wherein further including:

at least the first test message is configured in such a manner that it, or in response to the test message returned by the test unit ~~in response thereto, can be evaluated by~~ evaluating the returned test message with the second control unit for the function test.

9. (Currently Amended) [[A]] The method as claimed in claim [[1]] 17, wherein the data link between the client and the server is formed by an open [[and/]]or external data network, and further including:

in which method with one of the server application program and [[/or]] the client application program, generate-generating at least one main channel for data transmission via which and with the representation unit receives-receiving the output data and the control data via the main channel,

in which method with the test unit, generates-generating at least one additional channel for data transmission via which and transmitting the test messages are-transmitted via the additional channel.

10. (Currently Amended) [[A]] The method as claimed in claim 9, wherein further including:

in the context of the test procedure, with the second control unit, generates-generating an error message in the case where response to the test message returned by the test unit is not being in order and applies-thisapplying the error message, via the additional channel, to the test unit, which drives

with the test unit, driving in response thereto a sound card of the client in-order data processing apparatus to generate a suitable warning indication which can be acoustically perceived by the user.

11. (Currently Amended) [[A]] The method as claimed in claim [[1]] 17, wherein further including:

in the context of the test procedure, with the second control unit, generates-generating an error message in the case where in response to the test message returned by the test unit is not being in order and applies-this applying the error message to the representation unit, which forms

with the representation unit, forming on the client display screen, on the basis of the error message, a suitable warning indication which can be optically recognized by the user.

12. (Currently Amended) [[A]] The method as claimed in claim [[1]]
17, wherein further including:

with the control unit, ~~generates~~generating a video sequence, in which
~~method~~the first control representation is formed by a moving sequence of images
~~whereas~~and the second control representation is formed by a still image.

13. (Currently Amended) [[A]] The method as claimed in claim [[1]]
17, wherein further including:

~~the server has access to~~continuously generating patient data ~~which is~~
~~continuously generated by~~ with at least one patient monitoring device,

~~in which method with~~ the server application program, enabling at least
~~one enables~~ a client data processing apparatus ~~or several clients~~ to access the patient
data of one or more of the at least one patient[[s]], and

~~in which method with~~ an output unit of the server data processing
apparatus, arrangement prepares preparing the patient data of the respective selected
one or more of the at least one patient and forms forming therefrom output data which
forms on the client display screen, via the representation unit, an output representation
which is suitable to enable monitoring of the patient data by the user.

14. (Currently Amended) [[A]] The method as claimed in claim 13,
wherein at least one of the patient monitoring devices is a childbirth monitoring
device.

15. (Cancelled)

16. (Cancelled)

17. (New) A method of monitoring the reliability of a data link for
a data transmission between a server data processing apparatus which runs a server
application program, which server application program comprises a first control unit
for generating control data and a second control unit, and a client data processing
apparatus which runs a client application program, which client application program

comprises a representation unit for generating image data for representing an image on a client display screen which is connected to the client data processing apparatus, and a test unit, the server application program and the client application program exchanging data via a data link, the method comprising:

with the representation unit generating, in dependence on incoming control data, image data in order to form a control representation on the client display screen,

triggering the first control unit with a trigger signal,

with the first control unit, generating after the arrival of the trigger signal and for a predetermined running time which starts anew at each trigger signal, first control data which generate a first control representation which optically informs a user of the existence of a reliable data link on the display screen,

with the first control unit, generating second control data after expiration of the running time, which second control data generates a second control representation on the client display screen which optically informs the user of the absence of a reliable data link,

with the second control unit, carrying out a test procedure during which a test message is periodically transmitted to the test unit,

with the test unit, returning in dependence on each received test message, a reply test message to the server application program, triggering the control unit in the context of the test procedure in response to receiving the reply test message is in order, and

repeating the test procedure with which the first control unit with a period between the first transmission of the test messages which is shorter than the running time during which the first control unit generates the first control data.

18. (New) A computer medium carrying software code which when implemented on one or more processors performs the method of claim 17.

19. (New) A system which monitors reliability of data link over which output data is transmitted, the system comprising:

a terminal server including one or more processors programmed to:

receive data to be output as the output data,
establish a main channel over the data link over which
main channel the output data are transmitted and control data are
transmitted,

control the control data to have a first state of a first
time period and a second state after the first time period, and

establish at least one additional channel over the data
link over which additional channel test messages are transmitted with a
periodicity shorter than the first time period,;

a terminal client including one or more processors programmed to:

receive the output data,

generate a visual representation of the received output
data for display on a display device,

receive the control data,

in response to the control data having the first state,
generate a first representation for display on the display device and, in
response to the control data having the second state, generate a second
representation for display on the display device, the first representation
being indicative of the data link being reliable and the second
representation being indicative of the data link being unreliable, and

receive the test messages and transmitting a reply
message over the additional data link;

the one or more terminal server processors further being programmed

to:

in response to receiving the reply message, restart the
first time period, such that as long as reply messages are received in
intervals shorter than the first time period, the control signal remains in
the first state and the first representation is displayed on the display
device.

20. (New) The system as claimed in claim 19, further including:
a plurality of physiological parameter monitors which monitor a physiological parameter of a subject, the monitors being connected with the terminal server to supply monitored physiological parameters thereto as the data to be output as the output data such that displaying the first representation on the display device indicates to a user that the displayed physiological data is current physiological data.

21. (New) A method for monitoring the reliability of a data link over which output data is transmitted, the method comprising:

receiving data to be output as the output data,
establishing a main channel over the data link over which main channel the output data and control data are transmitted,
controlling the control data to have a first state for a first time period and a second state after the first time period,

establishing at least one additional channel over the data link and transmitting test messages over the additional channel with a periodicity shorter than the first time period,

receiving the output data which has been transmitted over the data link,
generating a visual representation of the received output data for display,

receiving the control data which has been transmitted over the first channel of the data link,

in response to receiving control data having the first state, generating a first representation on the display and in response to the received control data having the second state, generating a second representation on the display, the first representation being indicative of the data link being reliable to transmit current data and the second representation being indicative of the data link being unreliable for displaying output data substantially in real time,

receiving the test message which has been transmitted over the additional channel of the data link and transmitting a reply message over the additional data link,

in response to the reply message, restarting the first time period such that as long as reply messages are received in intervals shorter than the first time period, the control signal remains in the first state and the first representation is displayed.

22. (New) The method as claimed in claim 21, further including:

measuring physiological data of a patient, the physiological data being the received data which is output onto the main channel of the data link as the output data,

displaying a visual representation of the measured physiological data on the display.